



March Meeting

Auction

Friday, March 21

7:00 PM

**Our Savior's Lutheran
Church**

**1035 Carol Lane
Lafayette, CA**

March 21 is the first of two club auctions this year.

The auctions are a major source of funds for MDARC, so be sure to bring lots of spending money and equipment to sell!

The doors open at 6:00 P.M. for setup. The auction begins at 7:00 P.M. (one hour earlier than the usual meeting time), and ends promptly at 10:00 P.M.

Please note: there will not be VE exams prior to the auction. The exams will resume in April.

Presidential QRM

By Sam Lipson, KO6JR

Well, we are already into the third month of our 50th year of service. Time is flying. This month is our auction which is a great time to pick up used equipment you may need (or not need). It is also the time when you might thinking of off loading some equipment you may not need any more. Someone else may find your old equipment a treasure. So, I hope to see all of you at the auction this month.

Since it is already March, Field Day isn't far off. Listen for planning meetings and announcements on net, at the meetings and in the *Carrier*. We had a great time on the mountain last year and this year can be even better with your participation. I'm sure Lauren, WA6CIE, would be more than happy to tell you all about Field Day.

Also, another reminder, the Picnic is in July, the Sunday after the regular meeting. Listen to George, WB6OFH, and save that date! The picnic is always a very fun summer activity for the whole family.

Pacificon is well into the planning stages. If you are interested in helping, or just finding out what needs to be done, call Greg, KE6VTA, or Sylvia, KC6YJV, our co-chairs, and get involved. Pacificon is always fun to work!

Enough reminders!!!! We are still looking for ideas for the Club. Pacificon brings in money that the Club can use for worthwhile projects. We currently sponsor books and subscriptions for libraries as well as support some of our Club activities. We are expecting a proposal for the outfitting of our Trailer. However, we can always entertain suggestions from interested Club members. Put your thinking caps on and turn your ideas into reality.

Many of you have again requested the bright yellow jackets. Well, Jim, W6LTI, has again volunteered to organize this effort. He has also found a deal on golf shirts (similar to those used at Pacificon, but with pockets). Look for information from him elsewhere in this *Carrier*.

Lastly, we are still looking for help with Membership and *Carrier* distribution. If you are interested, call me at 229-5705. Your help will be greatly appreciated.

So, for now I wish you all good propagation and great contacts on the air-waves. Remember, answer that call from the new ham and make his or her day.

73, de Sam, KO6JR

...At Your Service

By Charles Arthur, AC6WU

If you have been following my suggestions for the past few months you should now have: 1) A reunion Plan, in case of separation in an emergency, 2) A mini-survival kit in your automobile, and 3) an Evacuation List of items to be taken with you during an emergency. If you do not have the above items taken care of yet, you may want to take a moment or two and rethink what you will do during an emergency. Being prepared to survive a disaster involves action, preferably action ahead of time. This means an effort on your part.

Now if you have taken care of these things let's consider what to do after a disaster. You may need financial assistance and will want to document any property loss for insurance and income tax purposes. Having ready access to the documents necessary for completing application forms, as well as those which could be difficult to replace, will eliminate undue delay and frustration.

Take time *now* and record this vital information. Make *two* copies. Keep one in a safe place in your home, fire resistant if possible (watertight plastic bags in the freezer). Keep the other off the premises in a safe deposit box or a friends house outside the area.

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Mt. Diablo Amateur Radio Club W6CX

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The Carrier is a monthly publication of the Mount Diablo Amateur Radio Club (MDARC). It is the policy of the editor to publish all material submitted by the membership provided such material is in good taste, relevant to amateur radio and of interest to MDARC members, and space is available.

All material must be submitted to the editor by the first of day of the month of publication. Material is accepted on a first-in, first-out basis. Articles and other material may be submitted via Internet email to w6uv@ccnet.com (preferred), or delivered to the editor at the address listed below. Material will be accepted in plain ASCII, Word for Windows, or WordPerfect format. Material may also be submitted as hardcopy.

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The opinions expressed in the Carrier are solely those of the editor or other contributors and do not necessarily reflect the opinions of either the Board of Directors or membership of MDARC.

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Rocky Ridge Repeater Group

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Jim Brunk, N6BHX (510) 372-8248

Technical Manager
Barry Winkler, KC6WYA (510) 427-2121

RRRG Repeaters
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441.325/+ (100 PL)
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Gold MDARC Jackets

There are many new members in MDARC who have not had an opportunity to purchase a GOLD JACKET with the club logo on them. Now is that chance. The jackets are excellent identification for you when helping in emergencies with Police, Fire Depart., Hospital, or RACES/ARES activities and for community activities such as parades, bike races. etc., or just for club events.

The lined Gold Jackets cost, incl. tax: (minimum order of 12 jackets)

Small, Medium, Large and Extra Large	\$21.65
2X Large	\$23.85
3X Large	\$26.00

NEW ITEM

Want a "golf shirt" rather than a jacket? Some of you ask for something cooler for summertime wear. It's a HANES 50/50 Jersey Sportshirt with pocket. Yellow color with logo printed on the back. 50% combed cotton, 50% polyester, 5.4 oz. Jersey fabric, clean finished insert pocket with two woodtone buttons, top stitched pocket, fashion collar and cuffs, top stitched shoulders, double needle hem.

The golf shirts cost, incl. tax (minimum order of 48 shirts)

Medium, Large and Extra Large	\$14.07
2X Large	\$16.24
[no 3X Large available in this fabric]	

There is a 3X Large in 100% cotton 5.6 oz Pique fabric which might be available at a cost of approximately \$24.00. No pocket. See or call Jim Whitely, W6LTI for more info.

To assist in this purchase, please follow these instructions:

- 1) On the front of an envelope write your NAME, CALL, TELEPHONE and AMOUNT ENCLOSED
- 2) On the front of the envelope also write the ITEM(S) and SIZE(S) you want.
- 3) Place a check inside for the amount of your order payable to ANDY'S TEE SHIRTS.
- 4) Seal the envelope and give to (in person, or via US-Mail)

James Whitely, W6LTI
3843 Concord Blvd.
Concord, CA 94519-1809

Any questions? Call Jim, W6LTI at 510-685-1905.

The deadline for ordering is the May MDARC General Meeting. Jackets and shirts will be ready at the June Meeting.

Ramblings From The Editor

By Jerry Gardner, W6UV

I hope everyone likes the new look of the Carrier this month. I intend to make a few more tweaks as I get the time to try out a few ideas. I never imagined design work could be so difficult! I have newfound respect for professional designers.

I'm pleased at the amount of material I received for this edition, but I'd still like to see more technical and how-to articles.

A club member, who prefers to remain anonymous, has graciously of-

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From the RRRG

By Jim Brunk, Chairman

Diablo Communications

Several events have happened since the last column was submitted to the *Carrier*. On February 7, 1997 Jay D. Caldis (caldis@bdt.com) posted the following message:

American Tower buys Diablo Communications.

American Tower Systems has purchased Diablo Communications, a Point Richmond Company with 30 sites in the Bay Area. Two thirds of Diablo's 90 tower antenna sites are in Northern California. In the East Bay, it has two sites in Oakland and one each in Berkeley, Danville, Walnut Creek and ON MT DIABLO. The deal, set to close in June, would give the Boca Raton-based ATS 450 antennas nationwide. Diablo is one of the most widely respected antenna site providers in the country, and has no plans for any changes in the company. No changes are planned for the staff of 35 in Diablo Communications.

At this time, we don't know what effect this will have with the on going negotiations. We are committed to continue to work with the site owners to establish an agreement.

There is to be a meeting hosted by Diablo Communications for all the representatives of all their ham clients on Mt. Diablo. During this meeting plans will be discussed. At this time (25 Feb. 97), it is scheduled for March first. We will know better after this meeting which way the future will go.

Informal but Unscientific Survey

So far, there has been only a few submissions to the survey. This low number is too small to plot. Consider taking out your hand held, and testing the repeater strength. Reprinted below are the rules:

Method

Use your hand held to gage the strength of the repeater's signal. Using a rubber duck antenna, place the radio on the metal roof of a car (to provide a ground plane). Listen to the repeater and note the signal strength. Note your location (please be as specific as you can), and the number of bars on your meter. Send your report to brunk@ix.netcom.com or to Jim L. Brunk on the club's BBS or drop it in the MDARC suggestion box. You are encouraged to report as many locations as you wish.

Signal Report Form

- | | |
|--------------------------------|-------------------------------------|
| 1. Name and Call | 4. Number of bars on the S meter |
| 2. Location of the measurement | 4a. Maximum number of bars possible |
| 3. Brand and Model of radio | 5. Which repeater? |

Answers to this Months Questions.

This months questions comes from Thomas Carter, KC6TNB, and Jeff Straus, KE6QYM.

Tom writes:

... Before the Dec. 95 storm, I used to participate in the ATV net every Thursday night. Since then I have not been able to. I understand the ATV side is subject to the same issues present with the rest of the repeater, but I rarely see anything on the status of ATV in the *Carrier*. I am wondering if it is up on low power, or if it is functioning at all?

This may be a dumb question, but why must we rely on Diablo Communications? Mt. Diablo is a big mountain, so why can't we look into using another antenna site further along the ridge? In fact, why not invest in our own tower? Heck, mount our antenna on a tall tree...

I have heard Diablo Communications is giving antenna mounting priority toward the highest paying clients. It would seem we have a good argument in stressing to them that emergency services should rate higher priority, and ham repeaters are one of them. A lot of good we can do now if another natural disaster were to occur...

The ATV machine is up and running 20 watts using the backup power amp. As you surmised, it is suffering from the same antenna location fate as the rest of our machines. Unfortunately, the signal is shaded by the mountain. When the antennas are placed on the tower, I suspect that you will have equal or better coverage than you had before the storm. We will endeavor to have more information about the ATV aspect of the hobby. (Any ATV'ers want to volunteer to write an ATV column?)

Diablo Communications manages the only commercial site available to us on Mt. Diablo. We rely on them because of this and because we have had a long term contractual relationship with them and the company that preceded them. For tens of years they have provided to us the tower space, rack volume and electric power required to run our repeaters. They have done this as a public service at a rate much reduced from the rate they charge commercial repeaters. While there are several other sites located on hill tops in the Bay Area, Mt. Diablo provides us with the best site for us to provide quality service to our members and the organizations that we serve through public events. With respect to putting up our own tower or mounting the antennas on trees, the State of California owns Mt. Diablo. They lease to the tower companies the space for the communications towers. The Club and repeater group do not want to be in the tower business.

Diablo Communications has been mounting antennas of other non ham clients. The antenna position on the tower was determined by the coverage pattern required by the client. After the storm, they told all the ham clients that they would be the last ones to be mounted on the tower. During the last fourteen months, we have been working with them to have an efficient set up put in place. We have continually stressed to Diablo Communications the service we provide to the many organizations both in time of disaster and during other public service events.

Jeff asks about the PL tone on the repeater output. He was wondering why it was removed and if it could be restored in the future.

The tone was removed because we were experiencing interference to the repeater input from external signals. This mixing of signals was an inherent problem associated with the temporary antenna location. Since our output tone is the same as the tone required to access the repeater, the machine was locking up when the repeater was keyed and the intermodulation signals were present. After the antennas are placed in their final positions on the tower, the tone will be reinstated.

(Answers by Howard Burk, KE6PTT, Keith Lattin, N6PMF, Jim Tittle, KC6SOE and Jim Brunk, N6BHX)

MDARC Board of Directors Meeting Minutes

February 21, 1997

The Board meeting was opened at 7:00 p.m. by President Sam Lipson, KO6JR, in the meeting room of MDARC. Other officers present were Cal Groom, KE6OEH; Greg Estep, KE6VTA; Charles Arthur, AC6WU; and Donna Cook, KE6PPM. Directors present: Paul Dickey, N6JOX; and John Stuart, KM6QX.

President Sam mentioned several items to be considered. One is that a

policy is needed for advertising in the annual roster in order to avoid future misunderstandings. Secondly, the job of membership chairman will need to be filled as soon as possible, with someone having reasonably good computer skills and access to a computer. The duties may need to be split. The opening will be announced at the general meeting.

There was some discussion as to the advertising rate for the membership roster. Last year's rate of \$40 for business card ad was raised to \$75 this year. Since there were only three ads purchased this year, it may be wise to discontinue advertising in the roster. This item will be discussed at the September board meet-

ing for next year's roster.

President Sam will meet with an auditor who has been recommended to audit the club's financial records.

Regarding a nominating committee, President Sam would like ideas from the board by June for nomination of 1998 officers. The only restraints for nominating committee members is that they are not currently an officer nor do they wish to run for an office for 1998.

Minutes from the last meeting were approved.

Treasurer Greg, KE6VTA, reported a balance of \$27,283. The 1997 budget was approved at the last meeting, and Greg will have more detailed informa-

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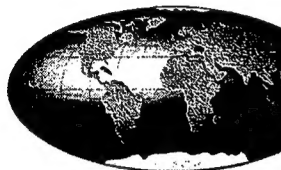
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tion at the next board meeting.

Richard Shappee, WA5HQJ, had suggested that the club maintain a calendar. President Sam asked that board members get together a timeline to publish by June.

Revisions of club bylaws were discussed at the informal meeting on February 10th at Emil Villa's. A few changes were proposed, and President Sam suggested that the bylaws be published as proposed, to be discussed at the April meeting, and approved at the May meeting. The new bylaws will increase the board by two additional members. In Article V, Section 1, Item 1.4, the second sentence should be changed to read, "Motions made at a regular membership meeting to expend funds not included in the budget shall not be acted upon at that meeting." Article I, Section 3, stating that the club shall not influence legislation has been stricken. The motion was made, seconded, and passed to publish the bylaws as corrected.

The next meeting will be held on March 10, 7:30 p.m. at Emil Villa's. The

meeting was adjourned at 7:20 p.m.

Respectfully submitted,
Donna Cook, KE6PPM

MDARC General Meeting Minutes February 21, 1997

The meeting was called to order at 8 p.m. by President Sam Lipson, KO6JR, who introduced guests, upgrades and new members.

Vice President Cal Groom, KE6OEH, announced that tonight's program will be given by representatives of the Baker to Vegas race. Next month's meeting will be an auction. Cal is looking for items from longtime club members for the 50th anniversary celebration.

Treasurer Greg Estep, KE6VTA, reported a bank balance of \$27,283 and distributed copies of 1996 Budget vs. Actuals.

Emergency Coordinator Charles Arthur, AC6WU, reported that RACES training was held in Danville last Saturday. Basic RACES training will be held in April, location to be announced. Mike Patterson, KE6JGA, is updating the RACES data cards. Please contact Mike to be sure that your information is current. Also, a new Disaster Service Worker form (DSW) must be filled out each year for those who wish to assist in the event of a disaster. Please see Mike to fill out a new form.

The minutes of last month's meeting were approved as published.

Tony Stanton, AC6GM, reported that there were eight test elements administered tonight, resulting in four upgrades.

President Sam announced the resignation of Dick Schulze, AA6DL, as membership chairman. A replacement is needed to assist with publication and distribution of the *Carrier*, as well as maintaining the membership data base. The duties may be split, rather than handled by one member. A requirement for the

continued on page 9

THE BASE STATION

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Proposed Revision of the MDARC Bylaws

The bylaws have been under revision since the middle of last year to make them current with the needs of the Club. We believe that we have come to consensus on the proposed revisions through open discussion at both Regular and Board meetings. Publication here is for the review of the membership. There will be a discussion of these proposed revisions at the April, 1997 regular Club meeting. Final approval of these revised bylaws is scheduled for the May, 1997 regular Club meeting.

The following were approved for recommendation to the membership at the 21 February 1997 Board of Directors meeting by 7 to 0 vote.

PREAMBLE: The object and purpose of the Mt. Diablo Amateur Radio club is to further the interest of Amateur radio and all those interested therein, to be of service to our community and country in times of need, to provide fellowship among our members, to promote harmony with all in our community, to maintain and develop strong leadership roles in amateur radio, to expand interest in communications technologies, to participate in education and public service, to promote amateur radio, to provide for growth of our hobby, and to increase friendship inside and outside the club.

ARTICLE I - NAME AND OFFICERS

Section 1. This organization shall be known as the "Mount Diablo Amateur Radio Club", a non-profit California corporation. Its officers shall consist of a President, Vice President, Secretary and Treasurer. All terms of office shall be one year. Each officer shall hold a current United States amateur radio license.

Section 2. Officers and directors shall be elected by ballot mailed to all members in good standing. Said ballots shall be tabulated at the regular November meeting. Newly elected officers and directors shall take office on the first of January.

ARTICLE II - CLUB DUTIES AND/OR AUTHORITY

Section 1. PRESIDENT

- 1.1 Duties shall be to call and preside over all official meetings.
- 1.2 Shall appoint all necessary committee chairs.

Section 2. VICE PRESIDENT

- 2.1 Duties shall be to assist the President in the discharge of the President's duties and to preside in the President's absence.
- 2.2 Shall also be the program chairperson.

Section 3. SECRETARY

- 3.1 Shall record the minutes of all official meetings and maintain a record of each for inspection by Club members.
- 3.2 Shall execute all necessary correspondence.
- 3.3 Shall maintain all Club Historical records.

Section 4. TREASURER

- 4.1 Shall act as the Principal Financial Officer of the club; be custodian of all club funds; keep complete and accurate records of the receipt and disbursement of such funds.
- 4.2 Shall maintain a true and complete account of all club assets and liabilities including capital items and prepare formal written reports as of June 30 and December 31. These reports shall be published in the *Carrier*.
- 4.3 Shall report the financial condition of the club at each general membership meeting.
- 4.4 Shall be responsible for the preparation of all necessary tax filings with city, county, state and federal jurisdictions for the Board of Directors.
- 4.5 Shall prepare for Board of Director's approval, an annual budget of income and expense of the club and its committees and groups. Shall arrange to have the budget published in the *Carrier* not later than the February issue.

Section 5. EMERGENCY COORDINATOR

- 5.1 Shall coordinate club activities with RACES/ARES officials.
- 5.2 Shall maintain all records of information pertaining to those activities.
- 5.3 The emergency Coordinator shall hold a United States amateur radio license and shall be elected from the membership.

Section 6. BOARD OF DIRECTORS

- 6.1 The board of directors shall consist of the officers, four directors, and the emergency coordinator, all of whom shall be voting members, and are expected to attend all Board meetings.
- 6.2 Shall meet and conduct the general overall plan of club activities. Minutes of all general membership meetings and Board of Director's meetings shall be published by the secretary in the *Carrier*.
- 6.3 Shall be empowered to authorize payment of any bills not exceeding \$200 that are not an approved budget item and shall be empowered to authorize payment of increases in budgeted items that do not increase the value of the budgeted item by more than \$200.
- 6.5 The Board of Directors may appoint a duly qualified regular club member to fill out the unexpired term of any office vacated by resignation, death or removal.

- 6.6 The four Directors shall be elected from United States licensed amateurs of the membership. Two shall be elected each even-numbered year, term of office to last two years. The second two directors to be elected in odd-numbered years for a two year period.

ARTICLE III - MEETINGS

Section 1. REGULAR MEETINGS

- 1.1 Regular meetings shall be held on the third Friday of each month, or at other times, when called by the president or a majority of the membership.

ARTICLE IV - MEMBERSHIP

Section 1. REGULAR MEMBERSHIP

- 1.1 Any person sincerely interested in Amateur Radio is eligible for membership regardless of race, creed, sex, or national origin.
- 1.2 Membership may be revoked after a review by the Board of Directors and a majority vote of the membership for any of the following: a) Serious infraction of the Radio Laws, Regulations and Treaties of the United States of America. b) Non-payment of dues. c) Failure to abide by these by-laws. A member whose membership has been revoked may apply for reinstatement of membership not sooner than one year from the date of the revocation.
- 1.4 Dues delinquent after January 31 automatically stand the member suspended. Reinstatement may be made upon payment of dues. A member in good standing shall be one whose membership has not been suspended nor revoked.
- 1.5 Additional family members must reside at the same address and one copy of the *Carrier* will be mailed to that family address unless otherwise requested.

ARTICLE V - FINANCE

Section 1. FINANCE

- 1.1 Any changes in the annual dues shall be voted upon by the Board of Directors and approved by a simple majority of the membership at a regular membership meeting. A proposal to revise the dues shall be published in the *Carrier* one month before a planned vote and the month of the planned vote.
- 1.2 Club expenses may be defrayed by dues, donation, auctions or benefit, but not by assessment.
- 1.3 All authorized checks shall be signed by the Treasurer, or any other officers designated by the Board of Directors.
- 1.4 Motions to expend non-budgeted club funds shall normally be presented to the Board of Directors prior to presentation to the membership at a regular meeting. Motions made at a regular membership meeting to expend funds not included in the budget shall not be acted upon at that meeting. Authorization to spend the proposed money shall be referred to the Board of Directors and no expenditure shall be made without their affirmative vote.

ARTICLE VI - NOMINATING COMMITTEE

Section 1. NOMINATING COMMITTEE

- 1.1 The nominating committee shall consist of three members appointed no later than the August Club meeting by the President.
- 1.2 It shall be the duty of the Nominating Committee a)to procure candidates for each office, b)to qualify nominated members as to membership and willingness to accept the nomination, c)to receive and tabulate ballots.
- 1.3 Nominations in all forms to shall be presented at the September meeting. Any United States licensed member may be proposed for nomination from the floor at the September meeting. The nominees' names shall be published in the October and November *Carriers*.
- 1.4 Ballots shall be mailed in the month of November. Voting may be by mail, with receipt required at the Club's post office box prior to the November meeting, or in person at the November meeting. A teller's committee shall be appointed by the President and the results of the election shall be announced at the November meeting.

ARTICLE VII - BY-LAWS REVISION

Section 1. REVISION

- 1.1 An amendment to the by-laws may be initiated by the Board of Directors or by written request to the Board of Directors signed by five members of the club. In order to be effective the proposed amendment shall be presented to the Board of Directors, published in the *Carrier*, and approved by two-thirds of the members present at the next regular membership meeting following such publication.

ARTICLE VIII - PUBLICATION

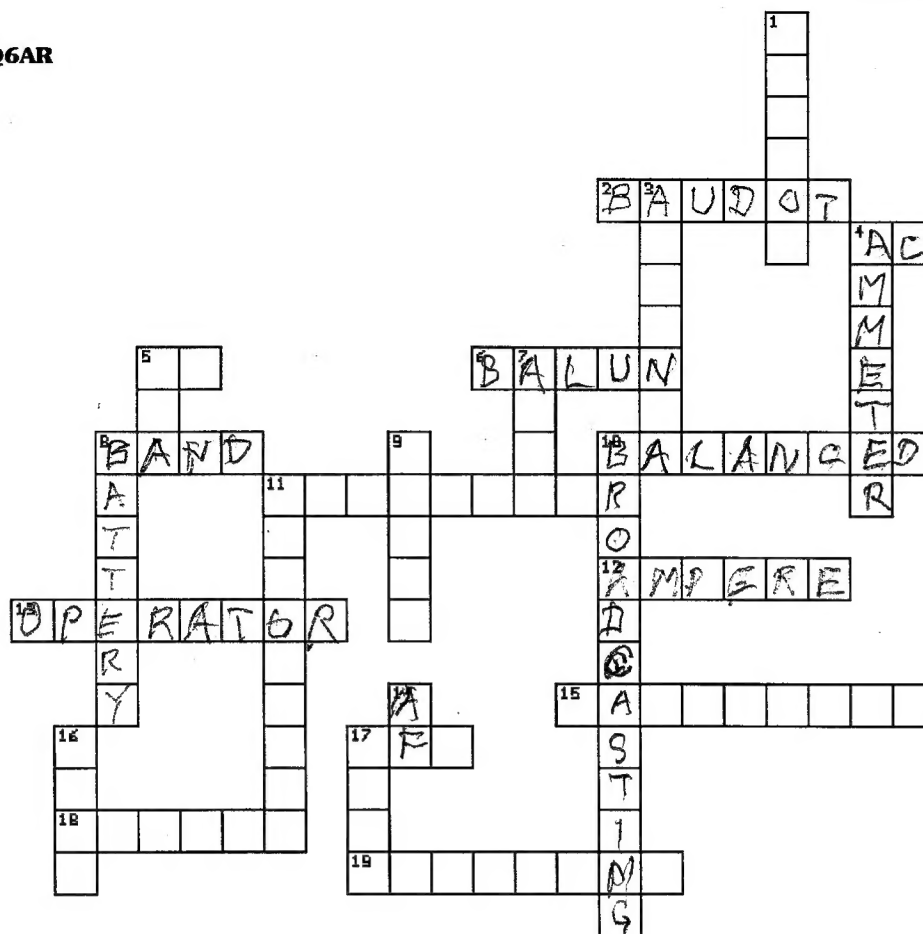
Section 1. PUBLICATION

- 1.1 There shall be an official publication maintained by the Mt. Diablo Amateur Radio Club in the form of a newsletter to be published monthly and called the "*Carrier*". The editor and staff shall be appointed by the board.
- 1.2 The financing of the *Carrier* shall be from the club's treasury.



Crossword

By Dan Goemmel, KQ6AR



Across

2. A radioteletype code that uses five bits.
4. Current that flows in one direction and then in the other. abr.
5. A method of combining an information signal and an RF carrier. abr.
6. A _____ is used when connecting balanced to unbalanced.
8. A _____ pass filter allows frequencies within its range to pass.
10. Open-wire line and ladder line are sometimes known to be _____.
11. A device used to increase the voltage, current of a signal.
12. The basic unit of electrical current.
13. An amateur _____ holds written authorization to be in control of an amateur station.
15. A range of associated frequencies.
17. A receiver circuit that sends a signal to the product detector. abr.
18. An antenna _____ may be used to change between different antennas and radios.
19. An antenna _____ network is used for correcting impedance differences between antenna systems and the transceiver.

Down

1. A ____ transmits for the purpose of propagation experiments.
3. A conductive element used in receiving or transmitting radio waves.
4. A test instrument that measures current.
5. FCC designator for international Morse code.
7. The ____ RF protection guide.
8. A device that stores electrical energy in the form of chemical energy.
9. A ____ diagram shows parts of a circuit in boxes.
10. Transmissions intended to be heard by the general public.
11. A device used by repeaters to enable users to make telephone calls.
14. Frequencies that can be heard by the human ear, are in the ____ range. abr.
16. Two switched audio tones are fed into the mic. input for transmitting radioteletype. abr.
17. A ____ antenna is directional.

...At Your Service

continued from page 1

Store deeds, wills, tax records for the past three years, birth certificates, and other vital documents. Duplicates should be kept in a safe place in another location. Alternatively, these documents should be in an accessible place and listed on the *most important list* to take in case of evacuation.

Take photographs of all valuables for documentation of insurance claims.

If you have a computer, store the following information on a couple of floppy disks in different locations:

Name and Social Security Number of all family members; School information including address, phone numbers, school policy; Name, address, and phone numbers of mother, father, employers, attorneys; Health Plan numbers; Pertinent medical information such as allergies and regular medication; Bank account/insurance policy numbers; Vehicle license and I.D. numbers.

Once all of these things have been accomplished and you and your family are safely taken care of, then you can think about picking up your HT and helping others. You cannot be an effective communicator if you have concerns for your family's safety and well being.

Remember, Amateur Radio is a **hobby** and can be used for our benefit as well as pleasure. Emergency communications are a serious business. Please think about joining ARES/RACES and become trained in the art of emergency communications.

During the month of April, ARES/RACES Basic Training will be given free for all who are interested. The date and location will be announced at the meeting as soon as they are confirmed. See you there!

Wishing you all good transmissions, 73... Charles, AC6WU.

General Meeting Minutes

continued from page 5

position is access to a computer and reasonably good computer skills.

George Roush, WB6OFH, announced that the annual picnic will be held on July 20th near the swimming pool and tennis courts at Concord Community Park on Cowell Road in Concord. Please see George to assist and to give ideas for the 50th anniversary of the club.

Walt Ebbett, KB6QIB, read a thank-you letter from a new ham for a CW

contact, as a reminder of how important it is for experienced hams to make a little effort to encourage those who are newly licensed and experiencing their first radio contacts.

Mike Patterson, KE6JGA, gave an update on public service events. Since last month's meeting, Mike has received nine requests for assistance, mostly for trail rides. The first trail ride on April 5th will require eight hams. The next event, the Baker to Vegas run, is not a club event, but will require many hams for communication support over the long course of the race.

Jim Brunk, N6BHX, representing the Rocky Ridge Repeater Group announced that Diablo Communications was recently purchased by American Tower Systems, but has no reason to believe that any change in the repeater situation will result. Pete Perata, KA6SHE, is selling new RRRG sweatshirts. Jim has received only one response to the informal survey published in last month's *Carrier*. Please respond, so that your concerns may be addressed.

Lauren Styles, WA6CIE, reported that Field Day will be held the fourth weekend in June on "the hill." Bands already covered are 40, 15, 10, and 80, and Lauren is looking for UHF and VHF coverage. Last year 75 people participated, but only twenty spent the night on the mountain. Lauren encouraged more to consider spending the night this year, for a wonderful view of the stars.

President Sam announced that this month's raffle prizes consist of fewer prizes, and prizes having more nearly equal value, so that they will be items that winners will appreciate having. The decision was made by the board. Next month, prizes will include two yellow jackets donated by widow of Silent Key Bob Cook.

Greg Estep, KE6VTA, reported that he is looking for a few more people to assist with Pacifcon. Monthly meetings are on the Saturday morning following the regular club meeting, 8:00 a.m. at Baker's Square on Willow Pass in Concord. This year's Pacifcon theme is Emergency Preparedness.

Jerry Gardner, W6UV, *Carrier* editor, said that March 1 is the deadline for submissions for the next issue.

President Sam said that the next MDARC board meeting will be held on Monday, March 10, 7:30 p.m. at Emil Villa's on Willow Pass Road in Concord. Everyone is welcome. Revised bylaws were never acted upon last year and will

be published in the March *Carrier* for discussion at the April meeting, and presented for approval at the May meeting.

The business portion of the meeting was adjourned at 8:36. Members present: 100.

After a short break, Cal, KE6OEH, introduced the program, in which Paul Carlin, KE6NVU, and Ron Susztar, N7TVE, gave an interesting overview of the Baker to Vegas Challenge Cup and the function of amateur radio communicators in support of the race. The Baker to Vegas is a relay held annually to promote physical fitness of law enforcement personnel. Last year 230 teams participated in the 120-mile relay. Each team consists of twenty runners and three alternates. A caravan of participating radio amateurs will leave the Bay Area on April 11 and return April 14. Last year there were 65 participants from the Bay Area. The goal for this year is 80-100. Paul and Ron demonstrated some of the equipment to be used, including an ingenious repeater system, and finished the presentation with a video filmed by ESPN at a previous Baker to Vegas race.

A drawing was held for door prizes and the meeting was adjourned at 9:45 p.m.

Respectfully submitted,

Donna A. Cook, KE6PPM

RRRG General Meeting Minutes

January 15, 1997

Chairman Jim Brunk called the meeting to order at 7:30 p.m. Treasurer Stuart Cannon reported a balance of \$19,593.00 in the bank.

The Technical Committee had nothing to report.

Richard Shappee reported that he is working on antennas for the doppler receiver project.

Sam Lipson reported the agenda to be on the MDARC general meeting January 17.

Jim Brunk reported on the situation with Diablo Communications. As of the 31st of December 1996, Diablo Communications cancelled all contracts with amateur repeater owners for repeaters on Mount Diablo. The group submitted a report in December which had been requested by Diablo Communications but had heard nothing from them yet. The group received a rental invoice for January, which is being understood to mean

that the repeaters are remaining on Mount Diablo on a month-to-month basis until a new agreement is reached. Jim answered a number of questions from the members about the above situation. The consensus of the members present was to retain a high-level site for the repeaters as the most desirable type of site. Jim solicited questions from the members to be answered and printed in the *Carrier*.

Lauren Styles requested that the group run the V.H.F. and U.H.F. bands for the MDARC on Amateur Radio Field Day in 1997.

The meeting was adjourned at 8:25 p.m.

Submitted by Bert Dawson, secretary.

Towers, antennas and all that stuff

by JC Smith, KØHPS

Antennas and the structures that support them are subjects near and dear to the hearts of all hams. What ham is there who does not believe that a beautifully constructed antenna farm (say, three 150' towers with stacked monobanders, and a couple of steerable dishes) would greatly enhance the neighborhood and add tremendous value to his/her property?

We've all heard stories about the trials and tribulations of erecting towers and antennas in our communities. Now we are endeavoring to put together a database containing the "straight scoop." It will be on the MDARC BBS, in the Library section. The idea is to get someone from each area to contact their local building department and find out what must be done to get a permit to put up an amateur antenna tower. We don't want to get involved in CC&Rs, just local governmental regulations.

Unincorporated Contra Costa County has been done, and City of Walnut Creek is in progress. We need reports from other areas. If you have recently been through the process and gotten a permit, or if you are planing to do so in the near future

Please contact us. You can do so through the bbs, or directly to JC Smith (addresses & phone numbers in the club directory).

We are also considering including other material of interest to tower and antenna builders in this SIG, and for those without computers we can make printed copies of some information avail-

able on request. This can become a valuable resource for present and future MDARC members, but we will need a little help from someone in each city and county for this to become complete. Please consider giving a little of your time to help with this worthwhile project.

Who's Who in Ham Radio

Author Unknown

Tech: Falls over doorsteps when entering buildings; Says, "Look at the choo-choo"; Wets himself with a water pistol; Plays in mud puddles; Mumbles to himself.

Novice: Makes high marks on the wall when trying to leap small buildings; Is run over by locomotive; Can sometimes handle a gun without inflicting self-injury; Talks to animals.

Tech-Plus: Runs into buildings; Recognizes locomotive two out of three times; Is not issued ammunition; Can stay afloat with a life preserver; Talks to walls.

Technician(Old): Barely clears a quonset hut; Looses tug-of-war with a locomotive; Can fire a speeding bullet; Swims well; Is occasionally addressed by GOD.

Conditional: Leaps short buildings with a running jump AND favorable winds. Is almost as powerful as a switch engine; Is faster than a speeding BB; Walks on water in an indoor swimming pool; Talks with GOD if special request is approved.

General: Leaps short buildings in a single bound; Is more powerful than a switch engine; Is just as fast as a speeding bullet; Walks on water if the sea is calm; Talks with GOD.

Advanced: Leaps tall buildings in a single bound; Is more powerful than a locomotive; Is faster than a speeding bullet; Walks on water, and gives policy to GOD.

Amateur Extra: Lifts buildings and walks under them; Kicks locomotives off the track; Catches speeding bullets in their teeth AND EATS THEM; Freezes water with a single glance; THEY ARE GOD!

MDARC 1996 Budgets vs. Actuals

By Greg Estep, KE6VTA

Income	Actual	Budget
Auction	3121	3121
Interest	237	300
Membership Dues	7982	8000
Pacificon 1996	9907	10000
Ads in Directory	275	0

Total Income 21522 21421

Expense

Carrier Postage	2018	1500
Carrier Printing	5289	6000
Total Carrier	7307	7500

Holiday Awards	238	200
Holiday Party	900	1000
Holiday Prizes	74	400
Total Holiday	1212	1600

Door Prizes	163	
Education	187	
Equipment (Trailer)	300	
Field Day	234	450
Insurance	795	1200
Membership	854	1800
Miscellaneous	294	
Office Expense	58	
Picnic	223	500
Refreshments	11	
Rent/Coffee	900	900
Schools/Libraries	1051	2500
State Filing Fees	35	30
Telephone	186	60
Transfer to RRRG	5000	5000

Total Expenses 18810 21540

Net 2712

Ode to the NMO

By Jerry Gardner, W6UV

The first thing I did when I bought my car was to drill a 3/4" hole in the body. Who in their right mind would drill a hole in a new car? I would. The hole is for an NMO mount for my 2-meter antenna.

Ever seen a police car or an ambulance with a mag-mount antenna? Neither have I. And you know why you don't? Because the Motorola NMO mount has many advantages over the mag mount that many hams seem to fa-

NETS

RRRG Nets

APRS Net Tuesdays 1930 Hours
 147.060/+ (100 pl)
 Net Control: Barry, KC6WYA

Phone Net Thursdays 1930 Hours
 147.060/+ (100 pl)
 Net Control: Jay Caldis, KT6Y

ATV Net Thursdays 2000 Hours
 Net Control: Mike Burke, KB6RMT
 Alternate: Sylvia, KC6YJV

Youth Net Thursdays 1900 Hours
 147.060/+ (100 pl)
 Net Control: Jeff Burke, KE6YAW

Contra Costa County Emergency Services HF Net

First Thursday following first Wednesday, 2000 Hours, 3.895 MHz. Net Control: Richard Shappee, WA5HQJ

Sheriff's Amateur Radio Communications Team

Clay Yale, N6YBQ
 (510) 228-8223

Contra Costa County ARES/RACES Nets

Thursdays, 1900 Hours

Central County 145.680 Simplex
 Jim Brunk*, N6BHX
 (510) 372-8248

East County 146.535 Simplex
 Jim Tittle*, KC6SOE
 (510) 432-3220

South County 146.355/+ (100 pl)
 Greg Nelson*, WB6MBD
 (510) 933-5381

West County 145.110/-
 Rich Parker*, KD6JCT
 (510) 237-2777

QSY to 147.735/- at 1920 Hours

Meeting of all County ARES/RACES Nets

Sam Lipson, District Emergency Coordinator, KO6JR
 (510) 229-5705

* Assistant District Emergency Coordinator

vor. The NMO is waterproof, it won't blow off at high speed, and it provides a better ground. Coax routing is easier since you don't have to find a place to snake it into the car, and it isn't subject to the constant mechanical stress caused by crimping it in a trunk lid or window.

The NMO mount is simple to install, but you *will* need to drill that dreaded hole first! The proper tools are important—you don't want to cause unnecessary damage to your car's exterior. I use a 3/4" Greenlee chassis punch to cut the hole. Others favor a Motorola hole saw. But whatever you use, be sure to read the instructions and understand them before you start—you won't get a second chance.

But what about the so-called "resale value" of the car? Simple—replace the ham antenna with a cheap NMO mount cellular antenna, and raise the price of the car by \$50 since it's now "cellular ready".

Ramblings From The Editor

continued from page 2

ferred to host a question and answer column in the *Carrier* each month. He requests that questions be submitted to him via the editor. He asks that the questions be related to amateur radio or related fields (i.e. computers, electronics, but not "how do I get a date?")

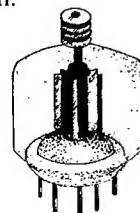
I've recently read that the ham population is up by a considerable margin over the last few years. Undoubtedly this is due to the new no-code technician license. Many who advocated the codeless license claimed that these new hams would help us save our bands. Unfortunately, very few of these new hams are making use of our little-used bands. Most seem to be content to spend their entire ham careers on one or two VHF

repeaters. Not only does this mean that we're not seeing expanded use of our lesser-used bands, but the new hams are not spending more than \$200-300 for a basic 2 meter rig. This is hurting the ham manufacturers, who were anticipating improved sales as the ranks of new hams swelled. This has not materialized, and one manufacturer, AEA, recently closed its doors; others may follow.

You may think I'm opposed to the codeless license, but the contrary is true. I'd like to see the newer members of our ranks branch out and try some of the more exotic bands and modes. There is much more to ham radio than 2-meter repeaters.

I note with sadness that Dick Schulze has decided to step down as MDARC membership chairman. Dick did a fantastic job at a task few are willing to attempt. In addition to maintaining the membership rolls, Dick also was responsible for the distribution of the *Carrier*. Thanks Dick. Your many contributions to the club have not gone unnoticed or unappreciated.

Progress is being made in getting the repeater antennas onto the new tower. There is finally hope that the installation may happen soon. I'm looking forward to improved coverage to San Ramon and Danville. These two areas have never enjoyed good coverage, even before the old tower came crashing down. The repeater seems to have better coverage in Placerville than it does in San Ramon. If the move to the new tower doesn't improve coverage to south county, I suggest RRRG investigate a linked repeater system.



CALENDAR OF EVENTS

March 10	7:30 pm	MDARC Board Meeting	Emil Villa's, Concord
March 12	7:30 pm	RRRG Steering Committee Meeting	Baker's Square, Concord Second Wednesday every Month
March 19	7:30 pm	RRRG General Meeting	Stonebrook Healthcare Center 4367 Concord Blvd., Concord
March 21	7:00 pm	MDARC Auction	Our Savior's Lutheran Church 1035 Carol Lane, Lafayette
March 29	9:00 am-Noon	Fairfield Ham Exams Dick, AB6EY, (916) 791-0268	Fairfield Senior Center 1200 Civic Drive, Fairfield Last Saturday of each Month
March 29		April Carrier Deadline	
April 5		Rose Peak Trail Ride	Joe Gregory, 510-283-6560
April 19		Spring Trail Ride	Joe Gregory, 510-283-6560
April 6	7:00 am-Noon	Livermore Swapmeet	Las Positas College, Livermore 1st Sunday every month

The Carrier
Newsletter of the Mt. Diablo Amateur Radio Club
P.O. Box 23222
Pleasant Hill, CA 94523

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Address Correction Requested

RRRG Meeting: March 19
MDARC Meeting: March 21